

# 9.3.1 WASTE ANALYSIS PLANS

The objective of a waste analysis plan (WAP) is to describe the procedures that will be followed by the facility operator to obtain sufficient waste information to operate the hazardous management facility safely and in compliance with regulatory standards. The WAP must describe the specific hazardous waste sampling and analysis procedures that will be conducted as part of the routine facility operation. If the plan is followed properly, waste-related discrepancies between permitted and actual activities should be avoided.

The objective of WAP is the same for both on-site and off-site facilities. However, it is logical that the operator of an on-site facility should know more about the waste being handled than would a facility operator of an off-site facility. Thus, off-site facilities are required to conduct more frequent analysis of wastes being handled than on-site facilities.

## KEY QUESTIONS

Does the WAP fully identify every waste to be handled at the facility?

For each waste listed, does the WAP list: RCRA versus non-RCRA, U. S. EPA hazardous waste code number, California waste code number, hazardous properties, monthly and annual volumes, processes producing waste, processes facility will use to handle waste, design capacity for processing unit handling waste, results of chemical and physical analysis of waste, parameters for which waste will be analyzed, sampling procedures to be used, and protective clothing and equipment to be worn and used by site personnel.

Has DTSC verified, through field observation, that the QA/QC procedures submitted by the facility are actually in use?

What is the possible variation in data, changes in facility information, and facility operation if each QA/QC procedure listed is not followed?

Has HML reviewed the WAP? If not, what are the professional qualifications of the person who reviewed the plan?

#### REQUIRED OUTPUTS

## APPLICABLE REGULATIONS AND STATUTES

State Laws and Regulations:

Cal. H&S Code, Div. 20, ch. 6.5

Section

25198 Hazardous Waste Testing Laboratories

Title 22, Cal. Code Regs.

Sections

Waste analysis required 66270.14(b)(2) 66270.14(b)(3) Copy of the WAP required

66264.13(a) Chemical and physical analysis of representative sample of waste

66264.13(b) Written WAP

66264.13(c) Inspection and analysis of waste received at an off-site facility Chapter 11,

Appendix I Representative Sampling Methods
Appendix II Waste Extraction Test (WET) Procedures

Appendix III Chemical Analysis Test Methods Appendix VII Basis for Listing Hazardous Waste

Appendix VIII Hazardous Constituents

Appendix X List of Chemical Names and Common Names for Hazardous Wastes and Hazardous

Materials

Appendix XI Organic Lead Test Method

Chapter 18,

Appendix I Toxicity Characteristic Leaching Procedure (TCLP)

Title 22, CCR, Division 4.5, Chapter 11,

Federal Laws and Regulations:

Other Laws and Regulations:

#### **POLICIES**

#### **DTSC Policies:**

Several sampling and analysis methods have been developed by the American Society for Testing and Materials (ASTM) and by U.S. EPA (e.g. "Test Methods for Evaluating Solid Waste" [SW-846]). These documents are continually updated to provide additional or improved test methods. Sometimes, however, it may be appropriate to employ a special sampling or test method that has not been approved by U.S. EPA. If such a method is proposed in the WAP, approval must be received by DTSC's Hazardous Materials Laboratory (HML) and/or by U.S. EPA. It is the permit writer's responsibility to ensure that proposed unusual or non-approved methods are reviewed and approved by HML.

The list of waste constituents listed by U.S. EPA and DTSC are not identical for the toxicity characteristic. Under the current situation, a facility would have to first determine if the waste is a RCRA toxic waste, using the TCLP test. If the waste does not meet this criterion, then the facility must proceed to analyze the waste using WET or a total concentration criterion to determine if the waste is a California (non-RCRA) hazardous waste [see 22 CCR 66261.24(a)(2)]. DTSC recommends the use of the WET test for inorganic constituent leaching and the use of the TCLP for organic constituent leaching (also retain the total threshold limit concentration).

**EPA Policies:** 

Other Policies:

#### INSTRUCTIONS TO APPLICANTS

Handouts to be Given to Applicants:

Examples to be Given to Applicants:

## CEQA CONSIDERATIONS

#### LEGAL CONSIDERATIONS

## **INTERAGENCY AGREEMENTS & MOUS**

## COORDINATION WITH OTHERS

Other DTSC Units:

Environmental/Legislative/Industry Groups:

Other Agencies:

For a complicated WAP, the permit writer should request assistance from HML in reviewing the plan.

**Special Requests:** 

#### STEP-BY-STEP PROCEDURES

Flow Charts:

Checklists:

#### TECHNICAL REFERENCES

Waste Analysis Plans Guidance Manual (October 1984); Office of Solid Waste, Document No. EPA 530-SW-84-012.

Design and Development of a Hazardous Waste Reactivity Testing Protocol, February 1984; Office of Solid Waste, Document No. EPA 600-2-84-057.

A method for Determining the Compatibility of Hazardous Wastes (April 1980); H.K. Hatayama et al., California Department of Health Services.

Test Methods for Evaluating Solid Waste, Third Edition SW-846; Office of Solid Waste, Document No. OSW 0000846.

#### EXAMPLES OF COMPLETED WORK PRODUCTS

## TIMELINE AND PLANNING

Permit Processing Chart:

Workload Standards:

Statutory & Other Deadlines:

WP File Name: 2/CH0931\_P.MAN

WP File Name for Checklist: 5/CK0931\_P.MAN

List of Examples:

List of Appendices:

List of References:

Waste Analysis Plans Guidance Manual (October 1984); Office of Solid Waste, Document No. EPA 530-SW-84-012.

Design and Development of a Hazardous Waste Reactivity Testing Protocol, February 1984; Office of Solid Waste, Document No. EPA 600-2-84-057.

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